



FORMOSA PLASTICS CORPORATION, TEXAS

ISO-9002 CERTIFIED
ISO-14001 CERTIFIED

P. O. BOX 700
201 FORMOSA DRIVE
POINT COMFORT, TX 77978

PHONE: 361-987-7000
FAX: 361-987-2363

November 2, 2006

Certified Mail # 7005 3110 0000 4885 9388

Ms. Misty Ward
U.S. EPA Region 6, Response and Prevention Branch (6SF-RC)
1445 Ross Avenue
Dallas, Texas 75202

Re: Request for Additional Information Regarding September 1, 2006
Emission Event Involving Ethylene Dichloride
Formosa Plastics Texas, 201 Formosa Drive, Point Comfort, Texas, 77978
TCEQ Regulated Entity No. 100218973, TCEQ Air Account No. CB-0028-Q

Dear Ms. Ward:

On October 23, 2006, Ms. Pam Phillips, on behalf of Samuel Coleman, mailed a Request for additional information regarding a the Emission Event occurring on September 1, 2006, at Formosa Plastics Corporation, Texas (FPC-TX) involving ethylene dichloride. FPC-TX is providing the additional information requested as Attachment 1, attached to this letter.

Should you have any questions, please contact Jennifer Hendricks at (361) 987-7268.

Sincerely,

R. P. Smith
Vice President/General Manager
Formosa Plastics Corporation, Texas

Attachments

9128554



Attachment 1

FPC-TX Response to Information Request
Regarding Release Involving Ethylene Dichloride
On September 1, 2006

FPC-TX Response to Information Request
Regarding Release involving Ethylene Dichloride
On September 1, 2006
ATTN: Ms. Misty Ward

Attachment 1

1. What is the legal name and address of Respondent?

Formosa Plastics Corporation, Texas (FPC-TX)
Randy Smith, Vice President/General Manager
201 Formosa Dr.
Point Comfort, Texas 77978

2. What is the business of Respondent? Please include your facility's primary Standard Industrial Classification (SIC) Code.

Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers; SIC 2821

3. Describe the release or threatened release that occurred to the environment, including but not limited to:

(a) Date on which such release occurred (include time of release);

On the afternoon of Friday, September 01, 2006 at approximately 5:45 PM ~~1745 hours~~ The VCM plant experienced a release of EDC, VCM, and benzene when RV-303A-1 on the VC302A column, lifted to the atmosphere.

(b) Name and title of the first person who initially discovered the release, date and time of the discovery; and state the name and title of each employee and manager notified of the release and the date and time of such notification;

Department Manager: Donald Janis
Supervisor: Steven Mang
Operator: Mike Craft
Operator: Hector Garza

Incident discovered at approximately 1745 on September 1, 2006, by Mike Craft and Donald Janis. The two men were in the parking lot preparing to leave at the close of the work day when the RV lift was heard. They immediately returned to the control room and notified the board operator Hector Garza and the shift supervisor Steven Mang. ~~_____~~

~~_____~~ was made to FPC Shift Safety at approximately ~~_____~~

3 hours

6 PM

(c) How the release occurred;

The release occurred due to a relief valve discharge. A formal incident investigation revealed two scenarios for the RV discharge; however, neither reason was able to be confirmed.

In the first scenario, the relief valve discharges early. The rupture disk and RV are both set at 30 psi. The RV was tested and certified to relieve at 30.9 psi. The two overhead pressure indications (DCS indications) were later confirmed accurate by calibration and mechanical gauges. The report further indicates that a double mechanical failure of both the rupture disk and the relief valve is unlikely.

In the second, more likely scenario, the RD and RV relieve because of a true column overhead high pressure that was concealed from the DCS pressure indications due to the location of the devices being downstream of an overhead condenser. This conclusion is supported by other process parameters (top tray temperature); however, when the pressure drop across the heat exchanger was performed, no appreciable pressure differential was measured. Although the scenario was not confirmed, a corrective action to relocate the column overhead pressure indication has been initiated.

(d) What hazardous substances were released;

EDC, VCM, and benzene were released to the air.

(e) State amount/quantity of each hazardous/extremely hazardous substance release;

EDC: 539.45 lbs. *EQ 100*
VCM: 1.94 lbs.
Benzene: 18.92 lbs.

(f) Where the release occurred;

The release occurred from the RV (relief valve) located at the top of VC-302A located in the Vinyl Chloride Unit at Formosa Plastics Corporation, TX.

(g) Description of any and all activities undertaken in response to the release or threatened release;

Immediate corrective actions to minimize emissions include lowering the steam pressure and isolating the feed to the column.

FPC-TX Response to Information Request
Regarding Release involving Ethylene Dichloride
On September 1, 2006
ATTN: Ms. Misty Ward

(h) Each medium affected by the release (air, water, land, facility only).

Air was affected by the release. There is no evidence of off-site impact.

(i) List of agencies notified of the release (date, time, name of agency, name and title of person making the report), and copies of initial reports and follow-up reports to all State, local, and Federal agencies:

Point Comfort Police Department

21:46 hours – 9/1/06 – Fax (**Attachment 2**)

Local Emergency Planning Committee

21:46 hours – 9/1/06 – Fax (**Attachment 2**)

Texas Commission on Environmental Quality

21:46 hours -9/1/06 – Fax (**Attachment 2**)

15:02 hours – 9/2/06-STEERS (AEME #80751) (**Attachment 3**)

13:16 – 9/7/06 – Follow up Fax (**Attachment 4**)

September 15, 2006 – Letter (**Attachment 5**)

National Response Center

9:45pm 21:45 hours – 9/1/06 – Report # 810066 – Thompson (**phone**)

(j) Duration of the release;

The release event lasted 15 minutes.

(k) Amount of any substance that carried off the facility, or out of the vessel, and method of that determination;

No substance was carried off the facility.

(l) Any Federal or State permits under which the release may have been covered. Cite the permits and permitted levels of emissions and provide copies of these permits; and

Hazardous chemical RV discharges directly to atmosphere are not authorized under the current air permit (Permit No. 19166 and PSD-TX-760M7).

(m) Any continuous release reports for CERCLA §103(f) under which the release may have been covered and provide copies of these reports.

13 1
14 2
15 3
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22

FPC-TX Response to Information Request
Regarding Release involving Ethylene Dichloride
On September 1, 2006
ATTN: Ms. Misty Ward

There were no continuous release reports submitted to any agency for this incident.

4.

- (a) If you have any reason to believe that there may be persons able to provide a more detailed or complete response to any Question contained herein or who may be able to provide additional responsive documents, identify such persons and the additional information or documents that they may have.**

FPC-TX is currently not aware of any additional information available regarding this incident.

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through two, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

R. P. Smith
Vice President/General Manager
Formosa Plastics Corporation, Texas

Attachment 2

Initial Fax Notification of Release to:
Point Comfort Police Department
LEPC
TCEQ

 *** MULTI TX/RX REPORT ***

TX/RX NO 0759
 PGS. 1
 TX/RX INCOMPLETE
 TRANSACTION OK [01]5534444
 [02]9872798
 [03]13618253101

EMERGENCY MGT
 PC POLICE
 TNRCC

ERROR INFORMATION

P. O. Box 700
 201 Formosa Drive
 Point Comfort, Texas 77975

Formosa Plastics Corporation - Texas

Upset/Maintenance/Spill Report Form (ENV-2)

All sections must be fully addressed. Enter N/A if not applicable.

Event Number.

060903

This form is to be completed for all spills and releases

Account No. CB-0038-Q	Permit No. PSD-TX-	Process Unit / Area Name VCM	Facility Name & FIN Fugitive Process Plant	Emission Point Name & EPN Fugitives 007-1
Regulated Entity No. RN100218973	226MG	Emission Point Location Fugitive emissions in the VCM Plant		
Notification Date and Time: 9/1/06 18:30				
Event Type? Check One <input checked="" type="checkbox"/> Upset <input type="checkbox"/> Maintenance <input type="checkbox"/> Start-up <input type="checkbox"/> Shut-down <input type="checkbox"/> Spill			Media Affected <input checked="" type="checkbox"/> Air <input type="checkbox"/> Ground <input type="checkbox"/> Water	
Start Date 9/1/06	End Date 9/1/06	Start Time 17:45	End Time 1800	Duration (Actual or Expected) 15 min
Wind Speed 7 mph	Wind Direction South	Direction Release Traveling North		
Tank/Line Capacity (if applicable): NA	Opacity Authorized (%): NA	Opacity Observed (%): N/A		

Release Quantities (Attach calculations and any necessary supporting documentation)

Constituent	Quantity Released (lbs.)		Reportable Quantity (lbs/ 24-hr)	Authorized (MAERT) Emissions	
	<input type="checkbox"/> Actual	<input checked="" type="checkbox"/> Potential		(lbs/hr)	(tpy)
VCM		6.73	1	3.68	16.09
EDC		1870.1	100	2.42	10.52
Benzene		65.6	10		

Quantity Released in Water:

NA

Description & best known cause of the emission event (Provide a complete and concise explanation):

VC-302A R/V released
 at pressure lower than normal setting

Basis used to determine quantities & additional information to evaluate the event

engineering calculations

DATE: 9/1/2006
 Power failure
 TIME: from 17:45 to 18:00 15 Minutes
 EQUIPMENT: VC-302A RV
 RV's ORIFICE SIZE: T 26 SQ-INCHES
 Start pressure at 15 psig and seat at 11.7 psig; average at 13.35 psig

Fluid compositions

	MWt	Volume%	Avg. MWt	Release	
N2	28	95.000	26.6	10647.84	Lbs of N2
EDC	99	4.719	4.67181	1870.10	Lbs of EDC
1,1-EDC	99	0.044	0.04356	17.44	Lbs of 1,1-EDC
VCM	62.5	0.0269	0.0168125	6.73	Lbs of VCM
Benzene	78	0.2101	0.163878	65.60	Lbs of benzene
Avg. MWt			31.50		

TOTAL RELEASE: 12607.70 LBS OF Total release to air

RELIEF VALVE FLOW CALCULATION --- VAPOR					
ORIFICE SIZE(Sq.Inch): D=0.110 ; E=0.196 ; F=0.307 ; G=0.503					
J=1.287 ; K=1.838 ; L=2.853 ; M=3.6 ; N=4.34 ; P= 6.38 ; Q=11.05					
R=16.0 ; S=16.0 ; T=26.0 ; V=42.19 ; W=60.75					
ORIFICE A:	26.00	Sq.Inch	SET P :	13.35	PSIG
TEMP :	245	°F		28.05	PSIA
	705	°R	Cp/Cv :	1.35	
K :	0.953		C :	343.29	
M. Wt :	31.50		Z :	1	
Wt :	50430.81	LBS/H			
	840.51	LBS/MIN			
	14.01	Lbs/Sec			

810066

Karl Hsieh
 09/01/06

Attachment 3

STEERS (AEME # 80751) reports

[Home](#)[Logout](#)[Contact Us](#)[Help](#)**STEERS****TCEQ Incident 80751 Submitted**

Regulated Entity: RN100218973 Today's date is: 09/14/2006

14:58

Please print this page.

This page confirms your submittal to the TCEQ.

Your confirmation number is 38125-C9E2D5FA8ACE9DF6257D6D39611D8B4C

You will also receive a confirmation e-mail.

The final report shown below has been submitted. No further changes to this information can be made through STEERS. If you need to change any of the information in this report, please contact your regional office.

Incident Tracking Number:	80751	Incident Status:	OPEN
Submittal Type:	FINAL REPORT		
Name of Owner or Operator:	FORMOSA PLASTICS CORPORATION TEXAS	Regulated Entity Number:	RN100218973
Physical Location:	INTXN OF FM 1593 & HWY 35 EXTENDING 1.8 MI N ON E SIDE OF FM 1593 & 1.7 MI E ON N SIDE HWY 35		
Event/Activity Type:	EMISSIONS EVENT		
Date and Time Event Discovered or Scheduled Activity Start:	09/01/2006 @ 17:45		
Event Duration:	0 hours, 15 minutes		
List of Process Unit or Area Common Names			
VCM Plant 300 Area			
List of Facility Common Names			
Facility Common Name		Facility Identification Number (FIN)	
Pressure Relief Valve RV-303A1		none assigned	
List of Emission Point Common Names			
Emission Point Common Name		Emission Point Number (EPN)	
Pressure Relief Valve RV-303A1		none assigned	
Cause of Emission Event or Excess Opacity Event, or Reason for Scheduled Activity:			
On September 1, 2006, at approximately 17:45 hours, Formosa Plastics Corporation, Texas discovered an Emissions Event in 300 Area of our Vinyl Unit. The event lasted for approximately 15 minutes and resulted in Reportable Quantity emissions of 539.45 lbs. of Ethylene Dichloride (EDC), 18.92 lbs. of Benzene, and 1.94 lbs. of Vinyl Chloride Monomer (VCM). The event was initially reported as an Unknown Quantity emission. Engineering calculations were utilized to estimate the amount of the emissions. The emissions resulted when Pressure Relief Valve RV-303A1 on Distillation Column VC-302A opened at a lower pressure than the pressure release setting on the valve. The pressure relief valve had reseated before field personnel reached the valve to isolate. Prior to completing of an investigation currently underway, the best known cause of the relief valve opening was due to an unknown malfunction. Pressure Relief Valve RV-303A1 does not have an assigned Facility Identification Number (FIN) or Emission Point Number (EPN) and is not authorized for emissions. RV-303A1 is located approximately 300 feet south of the VCM control room.			
Actions Taken, or Being Taken, to Minimize Emissions And/or Correct the Situation:			
Immediate corrective actions taken to minimize emissions included lowering steam pressure to the distillation column (VC-302A)			

and blocking in the column.

Basis Used to Determine Quantities and Any Additional Information Necessary to Evaluate the Event:

Engineering estimates and calculations.

Person Making Notification:	Ricky Pfuhl	Date/Time:	09/02/2006 03:02:32 PM
Notifier Phone:	361-9877465		
Incident Contact:	Andrew Hennessey		
Contact E-mail:	AndrewH@ftpc.fpcusa.com		
Contact Phone:	361-987 ext: 8070		
Notification Jurisdictions:	REGION 14 - CORPUS CHRISTI		
Affirmative Defense	The owner or operator of the regulated entity asserts this reported event or activity, as applicable, meets the applicable affirmative defense criteria. YES		
Publication Status:	VERIFIED		

[Back to Incident List](#)



Search Results - Air Emission Event Report for Tracking Number 80751

Regulated entity name	FORMOSA POINT COMFORT PLANT	Physical location	INTXN OF FM 1593 & HWY 35 EXTENDING 1.8 MI N ON E SIDE OF FM 1593 & 1.7 MI E ON N SIDE HWY 35
Regulated entity RN number	RN100218973	City, County	POINT COMFORT, CALHOUN
Type(s) of air emissions event:	EMISSIONS EVENT	Event began:	09/01/2006 5:45PM
This is based on the:	FINAL REPORT	Event ended:	09/01/2006 6:00PM
Cause	On September 1, 2006, at approximately 17:45 hours, Formosa Plastics Corporation, Texas discovered an Emissions Event in 300 Area of our Vinyl Unit. The event lasted for approximately 15 minutes and resulted in Reportable Quantity emissions of 539.45 lbs. of Ethylene Dichloride (EDC), 18.92 lbs. of Benzene, and 1.94 lbs. of Vinyl Chloride Monomer (VCM). The event was initially reported as an Unknown Quantity emission. Engineering calculations were utilized to estimate the amount of the emissions. The emissions resulted when Pressure Relief Valve RV-303A1 on Distillation Column VC-302A opened at a lower pressure than the pressure release setting on the valve. The pressure relief valve had reseated before field personnel reached the valve to isolate. Prior to completing of an investigation currently underway, the best known cause of the relief valve opening was due to an unknown malfunction. Pressure Relief Valve RV-303A1 does not have an assigned Facility Identification Number (FIN) or Emission Point Number (EPN) and is not authorized for emissions. RV-303A1 is located approximately 300 feet south of the VCM control room.		
Action taken	Immediate corrective actions taken to minimize emissions included lowering steam pressure to the distillation column (VC-302A) and blocking in the column.		
Emissions estimation method	Engineering estimates and calculations.		

Source 1: Pressure Relief Valve RV-303A1, EPN number none assigned

Contaminant	Authorization	Limit	Amount Released
Benzene	no specific emissions authorized	0.0	18.92 lbs (est.)
Ethylene dichloride	no specific emissions authorized	0.0	539.45 lbs (est.)
VCM	no specific emissions authorized	0.0	1.94 lbs (est.)

Source 2: Pressure Relief Valve RV-303A1, FIN number none assigned

Source 3: VCM Plant 300 Area, FIN number

No other sources

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Attachment 4

Follow up Fax Notification
To TCEQ

 *** TX REPORT ***

TRANSMISSION OK

TX/RX NO 0772
 CONNECTION TEL 19737167283
 SUBADDRESS
 CONNECTION ID
 ST. TIME 09/07 13:16
 USAGE T 00'22
 PGS. SENT 1
 RESULT OK

P O Box 700
 201 Formosa Drive
 Point Comfort, Texas 77978

Formosa Plastics Corporation - Texas

Upset/Maintenance/Spill Report Form (ENV-2)

All sections must be fully addressed. Enter N/A if not applicable.

Event Number:

060903

This form is to be completed for all spills and releases

Account No. CB-0038-Q	Permit No. PSD-TX-	Process Unit / Area Name VCM	Facility Name & FIN Fugitive Process Plant	Emission Point Name & EPN Fugitives 007-1
Regulated Entity No. RN100218973	226MG	Emission Point Location Fugitive emissions in the VCM Plant		
Notification Date and Time: 9/1/06 18:30		Check One: <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Follow-up		
Event Type? Check One <input checked="" type="checkbox"/> Upset <input type="checkbox"/> Maintenance <input type="checkbox"/> Start-up <input type="checkbox"/> Shut-down <input type="checkbox"/> Spill		Media Affected <input checked="" type="checkbox"/> Air <input type="checkbox"/> Ground <input type="checkbox"/> Water		
Start Date 9/1/06	End Date 9/1/06	Start Time 17:45	End Time 1800	Duration (Actual or Expected) 15 min
Wind Speed 7 mph	Wind Direction South	Direction Release Traveling North		
Tank/Line Capacity (if applicable): NA	Opacity Authorized (%): NA	Opacity Observed (%): NA		
Release Quantities (Attach calculations and any necessary supporting documentation)				
Constituent	Quantity Released (lbs.) <input checked="" type="checkbox"/> Actual <input checked="" type="checkbox"/> Potential	Reportable Quantity (lbs/ 24-hr)	Authorized (MAERT) Emissions (lbs/hr) (tpy)	
VCM	65.73 → 1.94	1	3.68	16.09
EDC	1870.1 → 539.45	100	2.42	10.58
Benzene	65.6 → 18.92	10		
Quantity Released in Water: NA				
Description & best known cause of the emission event (Provide a complete and concise explanation): VC-302A RV released at pressure lower than normal setting				

DATE: 9/1/2006

Power failure

TIME: from 17:45 to 18:00

15 Minutes

EQUIPMENT: VC-302A RV

RV's ORIFICE SIZE: T 26 SQ-INCHES

Start pressure at 15 psig and seat at 11.7 psig; average at 13.35 psig

After inspected RD, RD open as tri-angle. Bottom 7.5" and 4" height

The open area was $7.5" \times 4' / 2 =$ 15 sq-inch

Hydraulic area = 7.5 sq-inch

Fluid compositions

	MWt	Volume%	Avg. MWt	Release	
N2	28	95.000	26.6	3071.49	Lbs of N2
EDC	99	4.719	4.67181	539.45	Lbs of EDC
1,1-EDC dichloroethane	99	0.044	0.04356	5.03	Lbs of 1,1-EDC dichloroethane
VCM	62.5	0.0269	0.0168125	1.94	Lbs of VCM
Benzene	78	0.2101	0.163878	18.92	Lbs of benzene

Avg. MWt 31.50

TOTAL RELEASE:

3636.84 LBS OF Total release to air

Use RD opening calculation, RD opening area < 26 Sq-inch

RELIEF VALVE FLOW CALCULATION -- VAPOR					
ORIFICE SIZE(Sq.Inch): D=0.110 ; E=0.196 ; F=0.307 ; G=0.503					
J=1.287 ; K=1.838 ; L=2.853 ; M=3.6 ; N=4.34 ; P= 6.38 ; Q=11.05					
R=16.0 ; S=16.0 ; T=26.0 ; V=42.19 ; W=60.75					
ORIFICE A:	7.50	Sq.Inch	SET P :	13.35	PSIG
TEMP :	245	°F		28.05	PSIA
	705	°R	Cp/Cv :	1.35	
K :	0.953		C :	343.29	
M. Wt :	31.50		Z :	1	
Wt :	14547.35	LBS/H			
	242.46	LBS/MIN			
	4.04	Lbs/Sec			

1,1-dichloroethane

Karl Hsi

09/05/

use

these

calculations!

2-363

Attachment 5

Letter to TCEQ dated 9/15/2006



FORMOSA PLASTICS CORPORATION, TEXAS

ISO-9002 CERTIFIED
ISO-14001 CERTIFIED

P. O. BOX 700
201 FORMOSA DRIVE
POINT COMFORT, TX 77978

PHONE: 361-987-7000
FAX: 361-987-2363



September 15, 2006

Certified Mail # 7005 3110 0000 4885 5502

Mr. David Turner
Program Manager, Air Section
Texas Commission on Environmental Quality
Natural Resource Center
6300 Ocean Drive, Suite 1200
Corpus Christi, Texas 78412

Re: Formosa Plastics Corporation, Texas
TCEQ Air Quality Account No. CB-0038-Q
EDC Cracking, VCM and PVC Processing Facility
Permit Number 7699/PSD-TX-226M6 (FOP O1954)
Regulated Entity Number RN100218973
STEERS (AEME #80751) (FPC-TX event #060903)

Dear Mr. Turner:

On September 1, 2006, at approximately 17:45 hours, Formosa Plastics Corporation, Texas discovered an Emissions Event in 300 Area of our Vinyl Unit. The event lasted for approximately 15 minutes and resulted in Reportable Quantity emissions of 539.45 lbs. of Ethylene Dichloride (EDC), 18.92 lbs. of Benzene, and 1.94 lbs. of Vinyl Chloride Monomer (VCM). The event was initially reported as an Unknown Quantity emission. Engineering calculations were utilized to estimate the amount of the emissions. The quantity and speciation of the released material is attached.

The emissions resulted when Pressure Relief Valve RV-303A1 on Distillation Column VC-302A opened at a lower pressure than the pressure release setting on the valve. The pressure relief valve had reseated before field personnel reached the valve to isolate. Prior to completing of an investigation currently underway, the best known cause of the relief valve opening was due to an unknown malfunction. Pressure Relief Valve RV-303A1 does not have an assigned Facility Identification Number (FIN) or Emission Point Number (EPN) and is not authorized for emissions. RV-303A1 is located approximately 300 feet south of the VCM control room.

Immediate corrective actions taken to minimize emissions included lowering steam pressure to the distillation column (VC-302A) and blocking in the column.

There were no known injuries or exposures as a result of this release.

The Vinyl Chloride Monomer Unit produces VCM and Ethylene Dichloride (EDC) for the production of Polyvinyl Chloride (PVC) resins.

The following agencies were notified of the release:

Point Comfort Police Department
21:46 hours – 9/1/06 – Fax

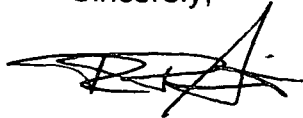
Local Emergency Planning Committee
21:46 hours – 9/1/06 – Fax

Texas Commission on Environmental Quality
21:46 hours – 9/1/06 – Fax
15:02 hours – 9/2/06 – STEERS (AEME #80751)

National Response Center
21:45 hours – 9/1/06 – Report Number – 810066– Thompson

Should you have any questions, please contact Andrew Hennessey at (361) 987-8070.

Sincerely,

A handwritten signature in black ink, appearing to read 'R. P. Smith', with a large, stylized flourish extending from the end of the signature.

R. P. Smith
Vice President/General Manager
Formosa Plastics Corporation, Texas

Attachments

DATE: 9/1/2006

Power failure

TIME: from 17:45 to 18:00

15 Minutes

EQUIPMENT: VC-302A RV

RV's ORIFICE SIZE: T 26 SQ-INCHES

Start pressure at 15 psig and seat at 11.7 psig; average at 13.35 psig

After inspected RD, RD open as tri-angle. Bottom 7.5" and 4" heighth

The open area was $7.5" \times 4" / 2 = 15$ sq-inch

Hydraulic area = 7.5 sq-inch

Fluid compositions

	MWt	Volume%	Avg. MWt	Release	
N2	28	95.000	26.6	3071.49	Lbs of N2
EDC	99	4.719	4.67181	539.45	Lbs of EDC
1,1-EDC dichloroethane	99	0.044	0.04356	5.03	Lbs of 1,1-EDC dichloroethane
VCM	62.5	0.0269	0.0168125	1.94	Lbs of VCM
Benzene	78	0.2101	0.163878	18.92	Lbs of benzene

Avg. MWt 31.50

TOTAL RELEASE:

3636.84 LBS OF Total release to air

Use RD opening calculation, RD opening area < 26 Sq-inch

RELIEF VALVE FLOW CALCULATION -- VAPOR					
ORIFICE SIZE(Sq.Inch): D=0.110 ; E=0.196 ; F=0.307 ; G=0.503					
J=1.287 ; K=1.838 ; L=2.853 ; M=3.6 ; N=4.34 ; P= 6.38 ; Q=11.05					
R=16.0 ; S=16.0 ; T=26.0 ; V=42.19 ; W=60.75					
ORIFICE A:	7.50	Sq.Inch	SET P :	13.35	PSIG
TEMP :	245	°F		28.05	PSIA
	705	°R	Cp/Cv :	1.35	
K :	0.953		C :	343.29	
M. Wt :	31.50		Z :	1	
Wt :	14547.35	LBS/H			
	242.46	LBS/MIN			
	4.04	Lbs/Sec			

Karl Hsieh
09/05/06

xi 9 0.5

2363

2925

**Texas Department of State Health Services
Hazardous Substances Emergency Events Surveillance (HSEES) Project**

Please verify, edit or correct the following information HMIS (DOT)# N/A

To: _____ Reported to X NRC X TCEQ # 724639

Company: Formosa Plastics Corporation-TX SIC Code/Type of business: 2821 / Plastics Materials, Synthetic Resins, and Nonvulcanizable Elastomers

Address/ Exact Location of event: 201 Formosa Drive Point Comfort, Texas 77978

Area Type: _____

Within 1/4 mile of this event any? residential areas _____ schools _____ hospitals _____ nursing homes _____ day cares _____ businesses _____ recreational areas _____ ? None in 1/4 mile X Lat. _____ Long. _____

Event start date: 9 / 1 /2006 Event start time (00:00 to 24:00 hrs) 17:45 {NRC # 810066}

Event end date: 9 / 1 /2006 Event end time (00:00 to 24:00 hrs) 18:00

Weather conditions at time of event No extreme X Rain _____ Snow _____ Fog _____ High winds _____ Weather disasters _____ Extreme heat (> 90°F) /cold (< 1°F) _____ Lightning _____ Unknown _____ Other _____

Factors related to the cause of the event. Must indicate both a Primary cause with P and a Secondary cause with S

Primary Choices:

Secondary Choices:

P Equipment failure _____ Improper mixing _____ Power failure/Electrical _____ Improper filling/loading/packing
Human error _____ Equipment failure _____ Fire _____ Unauthorized/improper dumping
Other _____ Human error _____ Explosion _____ Illicit drug production relate
Intentional/Planned _____ Performing maintenance _____ Forklift puncture _____ Vehicle or vessel collision
Bad weather condition/ _____ System/process upset _____ Loadshift _____ Overspray/misapplication
natural disasters _____ System startup/shutdown _____ Vehicle or vessel derailment/ rollover/capsize S No second factor

Transportation events: N/A What type of vehicle? N/A

Transport phase? Stationary loading/unloading From moving vehicle/vessel Release occurred enroute and later discovered at a fixed facility

What area within the fixed facility was involved in this event?

Transport within fixed facility Dump/Waste area Heating/Cooling for building
Process vessel X Other Pressure Relief Valve RV-303A1 Laboratory
Piping Ancillary process equipment Outdoor, farming or industrial area
Material handling area (includes flare, compressor, etc.) Outdoor, non-farming or non-industrial area
Storage above ground Transformer/Capacitor Indoor, non-industrial, residence area
Storage below ground Incinerator Indoor, non-industrial, non-living area

Was this event inside or X outside of a building or enclosed structure or both?

Number of people working @ time of event TOTAL: 1436 Day = 1011 Night = 425

Chemical information: [Please list ALL chemicals released, even those below Reportable Quantity (RQ.)]

Chemical	Amount/Units	Chemical	Amount/Units
1. Vinyl Chloride Monomer(VCM)	1.94 Lbs.	3. Benzene	18.92 Lbs.
2. Ethylene Dichloride	539.45 Lbs.	(please see calculations)	

Type of release: Spill _____ Air/Vapor X Fire _____ Explosion _____ Threatened release _____ Radiation _____

Was any environmental sampling done in relation to this event? No X Yes _____

For either on-site or off-site, were there any (Select all that apply.): *(If selected, we shall be contacting you for more information.)

symptoms _____ injuries _____ deaths _____ decontaminations of people (i.e., safety showers) _____ shelter-in-place _____
 evacuations of your building or surrounding areas _____?

If access was restricted to an area of the facility-what area was restricted? (Select all that apply.)

No restriction X room _____ wing/section of bldg _____ bldg _____ facility _____ parking lot _____ access road _____ other adjacent areas _____

Who responded to this incident? (Select all that apply.)

X No response _____ Certified HazMat _____ Co. response team _____ Law enforcement _____ Fire dept. _____ EMT
 _____ Hospital staff _____ Health dept./agency _____ Environ. agency (ex: TCEQ) _____ EPA Response team
 _____ Other _____

Were any responders injured? N/A

TDH Tracking# _____ ATSDR tracking# TX2004

Upon completion, please fax this form back to Richard Harris at (512) 458-7776. Rev 8/30/04